



# SEQUENCE LISTING

<110> BRIDON, Dominique P.  
DUFRESNE, Robert S.  
BOUDJELLAB, Nissab  
ROBITAILLE, Martin  
MILNER, Peter G.

<120> LONG LASTING FUSION PEPTIDE INHIBITORS OF VIRAL  
INFECTION

<130> REDC-1510 USA

<140> US 09/623,533

<141> 2000-09-05

<150> PCT/US00/13651

<151> 2000-05-17

<150> US 60/134,406

<151> 1999-05-17

<150> US 60/153,406

<151> 1999-09-10

<160> 545

<170> PatentIn Ver. 2.1

<210> 1

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 1

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 2

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 2

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg Tyr Leu Lys Asp Gln  
35

<210> 3

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 3

Tyr Thr Asn Thr Ile Tyr Thr Leu Leu Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 4

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 4

Tyr Thr Gly Ile Ile Tyr Asn Leu Leu Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Asn Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 5

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 5

Tyr Thr Ser Leu Ile Tyr Ser Leu Leu Glu Lys Ser Gln Thr Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 6

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 6

Leu Glu Ala Asn Ile Ser Lys Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Ile Phe  
20 25 30

Gly Asn Trp Phe  
35

<210> 7

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 7

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe  
20 25 30

Thr Asn Trp Leu  
35

<210> 8

<211> 41

<212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 8  
 Cys Gly Gly Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu  
           1                  5                  10                  15  
 Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu  
                   20                  25                  30  
 Ala Val Glu Arg Tyr Leu Lys Asp Gln  
           35                  40

<210> 9  
 <211> 38  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 9  
 Gln Gln Leu Leu Asp Val Val Lys Arg Gln Gln Glu Met Leu Arg Leu  
           1                  5                  10                  15  
 Thr Val Trp Gly Thr Lys Asn Leu Gln Ala Arg Val Thr Ala Ile Glu  
                   20                  25                  30  
 Lys Tyr Leu Lys Asp Gln  
           35

<210> 10  
 <211> 46  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 10  
 Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
           1                  5                  10                  15  
 Cys Asn Gly Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr  
                   20                  25                  30  
 Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
           35                  40                  45

<210> 11  
<211> 54  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 11  
Ala Ser Gly Val Ala Val Ser Lys Val Leu His Leu Glu Gly Glu Val  
1 5 10 15  
Asn Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser  
20 25 30  
Asn Gly Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys Asn Tyr  
35 40 45  
Ile Asp Lys Gln Leu Leu  
50

<210> 12  
<211> 53  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 12  
Gly Glu Pro Ile Ile Asn Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp  
1 5 10 15  
Glu Phe Asp Ala Ser Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser  
20 25 30  
Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu His Asn Val Asn Ala  
35 40 45  
Gly Lys Ser Thr Thr  
50

<210> 13  
<211> 48  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 13

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
 1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
 20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
 35 40 45

<210> 14

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
 peptide

<400> 14

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
 1 5 10 15

Cys Asn Gly Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys  
 20 25 30

Tyr Lys

<210> 15

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
 peptide

<400> 15

Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys  
 1 5 10 15

Asn Gly Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr  
 20 25 30

Lys Asn

<210> 16

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 16

Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys Asn Gly  
1 5 10 15

Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn  
20 25 30

Ala Val

<210> 17

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 17

Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Met Asn Gly  
1 5 10 15

Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn  
20 25 30

Ala Val

<210> 18

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 18

Val Ala Val Ser Lys Val Leu His Leu Glu Gly Glu Val Asn Lys Ile  
1 5 10 15

Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val  
20 25 30

Ser

<210> 19

<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 19  
Ala Val Ser Lys Val Leu His Leu Glu Gly Glu Val Asn Lys Ile Ala  
1 5 10 15

Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val Ser  
20 25 30

Val

<210> 20  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 20  
Val Ser Lys Val Leu His Leu Glu Gly Glu Val Asn Lys Ile Ala Leu  
1 5 10 15

Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val Ser Val  
20 25 30

Leu

<210> 21  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 21  
Ser Lys Val Leu His Leu Glu Gly Glu Val Asn Lys Ile Ala Leu Leu  
1 5 10 15

Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val Ser Val Leu  
20 25 30

Thr



<210> 22  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 22  
Lys Val Leu His Leu Glu Gly Glu Val Asn Lys Ile Ala Leu Leu Ser  
1 5 10 15  
Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val Ser Val Leu Thr  
20 25 30  
Ser

<210> 23  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 23  
Leu Glu Gly Glu Val Asn Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala  
1 5 10 15  
Val Val Ser Leu Ser Asn Gly Val Ser Val Leu Thr Ser Lys Val Leu  
20 25 30  
Asp

<210> 24  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 24  
Gly Glu Val Asn Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val  
1 5 10 15  
Ser Leu Ser Asn Gly Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu  
20 25 30

Lys

<210> 25  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 25  
Glu Val Asn Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser  
1 5 10 15  
Leu Ser Asn Gly Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys  
20 25 30

Asn

<210> 26  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 26  
Val Asn Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu  
1 5 10 15  
Ser Asn Gly Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys Asn  
20 25 30

Tyr

<210> 27  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 27  
Asn Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser  
1 5 10 15

Asn Gly Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys Asn Tyr  
20 25 30

Ile

<210> 28

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 28

Lys Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn  
1 5 10 15

Gly Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys Asn Tyr Ile  
20 25 30

Asp

<210> 29

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 29

Ile Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly  
1 5 10 15

Val Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys Asn Tyr Ile Asp  
20 25 30

Lys

<210> 30

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 30

Ala Leu Leu Ser Thr Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val  
1 5 10 15

Ser Val Leu Thr Ser Lys Val Leu Asp Leu Lys Asn Tyr Ile Asp Lys  
20 25 30

Gln

<210> 31

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 31

Gly Thr Ile Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala  
1 5 10 15

Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu  
20 25 30

Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln Ser  
35 40 45

Ser Ile Gly Asn Leu Ile Val Ala Ile Lys Ser Val Gln Asp Tyr Val  
50 55 60

Asn Lys Glu Ile Val Pro  
65 70

<210> 32

<211> 56

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 32

Tyr Thr Pro Asn Asp Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro  
1 5 10 15

Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu  
20 25 30

Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly  
35 40 45

Asn Trp His Gln Ser Ser Thr Thr

50

55

<210> 33  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 33  
 Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu  
 1 5 10 15  
 Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg  
 20 25 30  
 Arg Ser Asn  
 35

<210> 34  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 34  
 Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu  
 1 5 10 15  
 Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg  
 20 25 30  
 Ser Asn Gln  
 35

<210> 35  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 35  
 Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn  
 1 5 10 15  
 Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser

20	25	30
----	----	----

Asn Gln Lys  
35

<210> 36  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 36  
 Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys  
       1                  5                  10                  15  
 Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn  
                   20                  25                  30

Gln Lys Leu  
35

<210> 37  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 37  
 Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala  
       1                  5                  10                  15  
 Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln  
                   20                  25                  30

Lys Leu Asp  
35

<210> 38  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 38  
 Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys

1                      5                      10                      15  
 Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys  
                     20                      25                      30

Leu Asp Ser  
                     35

<210> 39  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
                     peptide

<400> 39  
 Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser  
   1                      5                      10                      15

Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu  
                     20                      25                      30

Asp Ser Ile  
                     35

<210> 40  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
                     peptide

<400> 40  
 Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp  
   1                      5                      10                      15

Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp  
                     20                      25                      30

Ser Ile Gly  
                     35

<210> 41  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
                     peptide

<400> 41

Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu  
1 5 10 15

Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser  
20 25 30

Ile Gly Asn  
35

<210> 42

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 42

Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu  
1 5 10 15

Glu Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile  
20 25 30

Gly Asn Trp  
35

<210> 43

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 43

Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu  
1 5 10 15

Ser Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly  
20 25 30

Asn Trp His  
35

<210> 44

<211> 35

<212> PRT

<213> Artificial Sequence



<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 44

Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser  
1 5 10 15

Lys Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly Asn  
20 25 30

Trp His Gln  
35

<210> 45

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 45

Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys  
1 5 10 15

Glu Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly Asn Trp  
20 25 30

His Gln Ser  
35

<210> 46

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 46

Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
1 5 10 15

Trp Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly Asn Trp His  
20 25 30

Gln Ser Ser  
35

<210> 47

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 47

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp  
1 5 10 15

Ile Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly Asn Trp His Gln  
20 25 30

Ser Ser Thr  
35

<210> 48

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 48

Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile  
1 5 10 15

Arg Arg Ser Asn Gln Lys Leu Asp Ser Ile Gly Asn Trp His Gln Ser  
20 25 30

Ser Thr Thr  
35

<210> 49

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 49

Thr Ala Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile  
1 5 10 15

Glu Lys Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser  
20 25 30

Val Gln Ser  
35

<210> 50  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 50  
Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys  
1 5 10 15  
Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln  
20 25 30  
Ser Ser Ile  
35

<210> 51  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 51  
Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu  
1 5 10 15  
Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile  
20 25 30  
Gly Asn Leu  
35

<210> 52  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 52  
Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala  
1 5 10 15  
Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly  
20 25 30

Asn Leu Ile  
35

<210> 53  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 53  
Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile  
1 5 10 15

Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn  
20 25 30

Leu Ile Val  
35

<210> 54  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 54  
Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg  
1 5 10 15

Asp Thr Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu  
20 25 30

Ile Val Ala  
35

<210> 55  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 55  
Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10 15

Thr Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu Ile  
20 25 30

Val Ala Ile  
35

<210> 56  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 56  
Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp Thr  
1 5 10 15

Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu Ile Val  
20 25 30

Ala Ile Lys  
35

<210> 57  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 57  
Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp Thr Asn  
1 5 10 15

Lys Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu Ile Val Ala  
20 25 30

Ile Lys Ser  
35

<210> 58  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 58

Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys  
1 5 10 15

Ala Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu Ile Val Ala Ile  
20 25 30

Lys Ser Val  
35

<210> 59

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 59

Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala  
1 5 10 15

Val Gln Ser Val Gln Ser Ser Ile Gly Asn Leu Ile Val Ala Ile Lys  
20 25 30

Ser Val Gln  
35

<210> 60

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 60

Lys Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val  
1 5 10 15

Gln Ser Ser Ile Gly Asn Leu Ile Val Ala Ile Lys Ser Val Gln Asp  
20 25 30

Tyr Val Asn  
35

<210> 61

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic

peptide

<400> 61

Leu Lys Glu Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln  
1 5 10 15

Ser Ser Ile Gly Asn Leu Ile Val Ala Ile Lys Ser Val Gln Asp Tyr  
20 25 30

Val Asn Lys  
35

<210> 62

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 62

Ala Ile Arg Asp Thr Asn Lys Ala Val Gln Ser Val Gln Ser Ser Ile  
1 5 10 15

Gly Asn Leu Ile Val Ala Ile Lys Ser Val Gln Asp Tyr Val Asn Lys  
20 25 30

Glu Ile Val  
35

<210> 63

<211> 47

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 63

Thr Trp Gln Glu Trp Glu Arg Lys Val Asp Phe Leu Glu Glu Asn Ile  
1 5 10 15

Thr Ala Leu Leu Glu Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr  
20 25 30

Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Gly Asn Trp Phe  
35 40 45

<210> 64

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 64

Trp Gln Glu Trp Glu Arg Lys Val Asp Phe Leu Glu Glu Asn Ile Thr  
1 5 10 15

Ala Leu Leu Glu Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu  
20 25 30

Leu Gln Lys  
35

<210> 65

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 65

Gln Glu Trp Glu Arg Lys Val Asp Phe Leu Glu Glu Asn Ile Thr Ala  
1 5 10 15

Leu Leu Glu Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu  
20 25 30

Gln Lys Leu  
35

<210> 66

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 66

Glu Trp Glu Arg Lys Val Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu  
1 5 10 15

Leu Glu Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln  
20 25 30

Lys Leu Asn  
35

<210> 67



<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 67  
Trp Glu Arg Lys Val Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu  
1 5 10 15  
Glu Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys  
20 25 30  
Leu Asn Ser  
35

<210> 68  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 68  
Glu Arg Lys Val Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu Glu  
1 5 10 15  
Glu Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu  
20 25 30  
Asn Ser Trp  
35

<210> 69  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 69  
Arg Lys Val Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu Glu Glu  
1 5 10 15  
Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn  
20 25 30  
Ser Trp Asp  
35

<210> 70  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 70  
Lys Val Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu Glu Glu Ala  
1 5 10 15  
Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser  
20 25 30  
Trp Asp Val  
35

<210> 71  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 71  
Val Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu Glu Glu Ala Gln  
1 5 10 15  
Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp  
20 25 30  
Asp Val Phe  
35

<210> 72  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 72  
Asp Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu Glu Glu Ala Gln Ile  
1 5 10 15  
Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp  
20 25 30

Val Phe Gly  
35

<210> 73  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 73  
Phe Leu Glu Glu Asn Ile Thr Ala Leu Leu Glu Glu Ala Gln Ile Gln  
1 5 10 15  
Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val  
20 25 30

Phe Gly Asn  
35

<210> 74  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 74  
Pro Asp Ala Val Tyr Leu His Arg Ile Asp Leu Gly Pro Pro Ile Ser  
1 5 10 15  
Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly Asn Ala Ile Ala Lys  
20 25 30

Leu Glu Asp  
35

<210> 75  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 75  
Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly Asn Ala Ile Ala Lys  
1 5 10 15

Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp Gln Ile Leu Arg Ser  
20 25 30

Met Lys

<210> 76

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 76

Leu His Arg Ile Asp Leu Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp  
1 5 10 15

Val Gly Thr Asn Leu Gly Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu  
20 25 30

Leu Leu

<210> 77

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 77

His Arg Ile Asp Leu Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp Val  
1 5 10 15

Gly Thr Asn Leu Gly Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu  
20 25 30

Leu Glu

<210> 78

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 78

Arg Ile Asp Leu Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp Val Gly  
1 5 10 15

Thr Asn Leu Gly Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu  
20 25 30

Glu Ser

<210> 79

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 79

Ile Asp Leu Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp Val Gly Thr  
1 5 10 15

Asn Leu Gly Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu Glu  
20 25 30

Ser Ser

<210> 80

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 80

Asp Leu Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp Val Gly Thr Asn  
1 5 10 15

Leu Gly Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser  
20 25 30

Ser Asp

<210> 81

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 81

Leu Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp Val Gly Thr Asn Leu  
1 5 10 15

Gly Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser  
20 25 30

Asp Gln

<210> 82

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 82

Gly Pro Pro Ile Ser Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly  
1 5 10 15

Asn Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp  
20 25 30

Gln Ile

<210> 83

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 83

Pro Pro Ile Ser Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly Asn  
1 5 10 15

Ala Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp Gln  
20 25 30

Ile Leu

<210> 84

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 84

Pro Ile Ser Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly Asn Ala  
1 5 10 15

Ile Ala Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp Gln Ile  
20 25 30

Leu Arg

<210> 85

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 85

Ser Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly Asn Ala Ile Ala  
1 5 10 15

Lys Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp Gln Ile Leu Arg  
20 25 30

Ser Met

<210> 86

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 86

Leu Glu Arg Leu Asp Val Gly Thr Asn Leu Gly Asn Ala Ile Ala Lys  
1 5 10 15

Leu Glu Ala Lys Glu Leu Leu Glu Ser Ser Asp Gln Ile Leu Arg Ser  
20 25 30

Met Lys

<210> 87

<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 87

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp  
35

<210> 88

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 88

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn

<210> 89

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 89

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp



<210> 90  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 90  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

<210> 91  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 91  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser  
20 25 30

<210> 92  
<211> 30  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 92  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala  
20 25 30

<210> 93  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 93

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp  
20 25

<210> 94

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 94

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys  
20 25

<210> 95

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 95

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp  
20 25

<210> 96

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 96

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu  
20 25

<210> 97  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 97  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu  
20 25

<210> 98  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 98  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu  
20

<210> 99  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 99  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu  
20

<210> 100

<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 100  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu  
20

<210> 101  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 101  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln  
20

<210> 102  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 102  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu  
20

<210> 103  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic

peptide

<400> 103

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn

<210> 104

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 104

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys

<210> 105

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 105

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu

<210> 106

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 106

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

<210> 107

<211> 15

<212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 107  
 Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln  
   1                  5                  10                  15  
  
  
 <210> 108  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 108  
 Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn  
   1                  5                  10  
  
  
 <210> 109  
 <211> 13  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 109  
 Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln  
   1                  5                  10  
  
  
 <210> 110  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 110  
 Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser  
   1                  5                  10  
  
  
 <210> 111  
 <211> 11  
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 111

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu  
1 5 10

<210> 112

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 112

Tyr Thr Ser Leu Ile His Ser Leu Ile Glu  
1 5 10

<210> 113

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 113

Tyr Thr Ser Leu Ile His Ser Leu Ile  
1 5

<210> 114

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 114

Tyr Thr Ser Leu Ile His Ser Leu  
1 5

<210> 115

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 115

Tyr Thr Ser Leu Ile His Ser  
1 5

<210> 116

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 116

Tyr Thr Ser Leu Ile His  
1 5

<210> 117

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 117

Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 118

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 118

Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10



Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
 15 20 25 30

Trp Asn Trp Phe

<210> 119  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 119  
 Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
 1 5 10

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
 15 20 25

Trp Asn Trp Phe  
 30

<210> 120  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 120  
 Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
 1 5 10

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
 15 20 25

Trp Asn Trp Phe  
 30

<210> 121  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 121  
 His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln



1	5	10
Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe		
15	20	25

<210> 125  
 <211> 27  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 125
Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
1 5 10

Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe
15 20 25

<210> 126  
 <211> 26  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 126
Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
1 5 10

Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe
15 20 25

<210> 127  
 <211> 25  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 127
Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu
1 5 10

Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe
15 20 25

<210> 128  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 128  
Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu  
1 5 10  
Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
15 20

<210> 129  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 129  
Asn Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys  
1 5 10 15  
Trp Ala Ser Leu Trp Asn Trp Phe  
20

<210> 130  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 130  
Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp  
1 5 10 15  
Ala Ser Leu Trp Asn Trp Phe  
20

<210> 131  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 131

Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala  
1 5 10 15

Ser Leu Trp Asn Trp Phe  
20

<210> 132

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 132

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser  
1 5 10 15

Leu Trp Asn Trp Phe  
20

<210> 133

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 133

Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
1 5 10 15

Trp Asn Trp Phe

<210> 134

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 134

Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser  
1 5 10

Leu Trp Asn Trp Phe  
15

<210> 135  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 135  
Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser  
1 5 10

Leu Trp Asn Trp Phe  
15

<210> 136  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 136  
Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10 15

<210> 137  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 137  
Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10 15

<210> 138  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 138  
Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10

<210> 139  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 139  
Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10

<210> 140  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 140  
Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10

<210> 141  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 141  
Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10

<210> 142  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 142  
Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe

1

5

10

<210> 143

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 143

Lys Trp Ala Ser Leu Trp Asn Trp Phe

1

5

<210> 144

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 144

Trp Ala Ser Leu Trp Asn Trp Phe

1

5

<210> 145

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 145

Ala Ser Leu Trp Asn Trp Phe

1

5

<210> 146

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 146

Ser Leu Trp Asn Trp Phe

1

5



<210> 147  
<211> 37  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 147  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30  
Arg Tyr Leu Lys Asp  
35

<210> 148  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 148  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30  
Arg Tyr Leu Lys  
35

<210> 149  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 149  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg Tyr Leu  
35

<210> 150  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 150  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg Tyr

<210> 151  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 151  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg

<210> 152  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 152  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu

20

25

30

<210> 153  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 153  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1 5 10 15  
 Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val  
 20 25 30

<210> 154  
 <211> 30  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 154  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1 5 10 15  
 Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala  
 20 25 30

<210> 155  
 <211> 29  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 155  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1 5 10 15  
 Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu  
 20 25

<210> 156  
 <211> 28  
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 156

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile  
20 25

<210> 157

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 157

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg  
20 25

<210> 158

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 158

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala  
20 25

<210> 159

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 159

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln  
20 25

<210> 160

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 160

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu  
20

<210> 161

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 161

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln  
20

<210> 162

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 162

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys  
20

<210> 163  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 163  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile  
20

<210> 164  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 164  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln  
20

<210> 165  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 165  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp

<210> 166  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 166

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val

<210> 167

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 167

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr

<210> 168

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 168

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

<210> 169

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 169

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln  
1 5 10 15

<210> 170

<211> 14

<212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 170  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu  
   1                  5                  10  
  
  
 <210> 171  
 <211> 13  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 171  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu  
   1                  5                  10  
  
  
 <210> 172  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 172  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His  
   1                  5                  10  
  
  
 <210> 173  
 <211> 11  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 173  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln  
   1                  5                  10  
  
  
 <210> 174  
 <211> 10  
 <212> PRT



<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 174

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln  
1 5 10

<210> 175

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 175

Asn Asn Leu Leu Arg Ala Ile Glu Ala  
1 5

<210> 176

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 176

Asn Asn Leu Leu Arg Ala Ile Glu  
1 5

<210> 177

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 177

Asn Asn Leu Leu Arg Ala Ile  
1 5

<210> 178

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 178

Asn Asn Leu Leu Arg Ala  
1 5

<210> 179

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 179

Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg Tyr Leu Lys Asp Gln  
35

<210> 180

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 180

Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr  
1 5 10 15

Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg Tyr Leu Lys Asp Gln  
35

<210> 181

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic

peptide

<400> 181

Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val  
1 5 10 15

Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg  
20 25 30

Tyr Leu Lys Asp Gln  
35

<210> 182

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 182

Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp  
1 5 10 15

Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr  
20 25 30

Leu Lys Asp Gln

<210> 183

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 183

Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gln  
1 5 10 15

Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
20 25 30

Lys Asp Gln

<210> 184

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 184

Ile	Glu	Ala	Gln	Gln	His	Leu	Leu	Gln	Leu	Thr	Val	Trp	Gln	Ile
1				5					10					15

Lys	Gln	Leu	Gln	Ala	Arg	Ile	Leu	Ala	Val	Glu	Arg	Tyr	Leu	Lys
			20					25					30	

Asp Gln

<210> 185

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 185

Glu	Ala	Gln	Gln	His	Leu	Leu	Gln	Leu	Thr	Val	Trp	Gln	Ile	Lys
1				5					10					15

Gln	Leu	Gln	Ala	Arg	Ile	Leu	Ala	Val	Glu	Arg	Tyr	Leu	Lys	Asp
			20					25					30	

Gln

<210> 186

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 186

Ala	Gln	Gln	His	Leu	Leu	Gln	Leu	Thr	Val	Trp	Gln	Ile	Lys	Gln
1				5					10					15

Leu	Gln	Ala	Arg	Ile	Leu	Ala	Val	Glu	Arg	Tyr	Leu	Lys	Asp	Gln
			20					25					30	

<210> 187

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 187

Gln Gln His Leu Leu Gln Leu Thr Val Trp Gln Ile Lys Gln Leu  
1 5 10 15

Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25

<210> 188

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 188

Gln His Leu Leu Gln Leu Thr Val Trp Gln Ile Lys Gln Leu Gln  
1 5 10 15

Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25

<210> 189

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 189

His Leu Leu Gln Leu Thr Val Trp Gln Ile Lys Gln Leu Gln Ala  
1 5 10 15

Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25

<210> 190

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 190

Leu Leu Gln Leu Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg

1	5	10	15
Ile	Leu	Ala	Val
	Glu	Arg	Tyr
	Leu	Lys	Asp
		Gln	
	20	25	

<210> 191  
 <211> 25  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 191														
Leu	Gln	Leu	Thr	Val	Trp	Gln	Ile	Lys	Gln	Leu	Gln	Ala	Arg	Ile
1				5					10					15

Leu	Ala	Val	Glu	Arg	Tyr	Leu	Lys	Asp	Gln
			20					25	

<210> 192  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 192														
Gln	Leu	Thr	Val	Trp	Gln	Ile	Lys	Gln	Leu	Gln	Ala	Arg	Ile	Leu
1				5					10					15

Ala	Val	Glu	Arg	Tyr	Leu	Lys	Asp	Gln
					20			

<210> 193  
 <211> 23  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 193														
Leu	Thr	Val	Trp	Gln	Ile	Lys	Gln	Leu	Gln	Ala	Arg	Ile	Leu	Ala
1				5					10					15

Val	Glu	Arg	Tyr	Leu	Lys	Asp	Gln
				20			

<210> 194  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 194  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val  
1 5 10 15

Glu Arg Tyr Leu Lys Asp Gln  
20

<210> 195  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 195  
Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
1 5 10 15

Arg Tyr Leu Lys Asp Gln  
20

<210> 196  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 196  
Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg  
1 5 10 15

Tyr Leu Lys Asp Gln  
20

<210> 197  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 197

Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr  
1 5 10 15

Leu Lys Asp Gln

<210> 198

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 198

Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
1 5 10 15

Lys Asp Gln

<210> 199

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 199

Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys  
1 5 10 15

Asp Gln

<210> 200

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 200

Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10 15



<210> 201  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 201  
Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10 15

<210> 202  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 202  
Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 203  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 203  
Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 204  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 204  
Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 205

<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 205  
Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 206  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 206  
Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 207  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 207  
Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5

<210> 208  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 208  
Val Glu Arg Tyr Leu Lys Asp Gln  
1 5

<210> 209  
<211> 7

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 209  
Glu Arg Tyr Leu Lys Asp Gln  
1 5

<210> 210  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 210  
Arg Tyr Leu Lys Asp Gln  
1 5

<210> 211  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 211  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe  
20 25 30

Thr Asn Trp  
35

<210> 212  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 212  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln

1	5	10	15												
Glu	Lys	Asn	Met	Tyr	Glu	Leu	Gln	Lys	Leu	Asn	Ser	Trp	Asp	Val	Phe
			20						25					30	

Thr Asn

<210> 213  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 213
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln
1 5 10 15

Glu	Lys	Asn	Met	Tyr	Glu	Leu	Gln	Lys	Leu	Asn	Ser	Trp	Asp	Val	Phe
			20						25					30	

Thr

<210> 214  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 214
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln
1 5 10 15

Glu	Lys	Asn	Met	Tyr	Glu	Leu	Gln	Lys	Leu	Asn	Ser	Trp	Asp	Val	Phe
			20						25					30	

<210> 215  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 215
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val  
20 25 30

<210> 216  
<211> 30  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 216  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp  
20 25 30

<210> 217  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 217  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp  
20 25

<210> 218  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 218  
Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser  
20 25

<210> 219  
<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 219

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn  
20 25

<210> 220

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 220

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu  
20 25

<210> 221

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 221

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys  
20 25

<210> 222

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 222

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln  
20

<210> 223

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 223

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu  
20

<210> 224

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 224

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu  
20

<210> 225

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 225

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr

<210> 226  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 226  
 Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
     1                    5                    10                    15

Glu Lys Asn Met  
                     20

<210> 227  
 <211> 19  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 227  
 Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
     1                    5                    10                    15

Glu Lys Asn

<210> 228  
 <211> 18  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 228  
 Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
     1                    5                    10                    15

Glu Lys

<210> 229  
 <211> 17  
 <212> PRT  
 <213> Artificial Sequence



<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 229

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu

<210> 230

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 230

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

<210> 231

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 231

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln  
1 5 10 15

<210> 232

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 232

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile  
1 5 10

<210> 233

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 233

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln  
1 5 10

<210> 234

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 234

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala  
1 5 10

<210> 235

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 235

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln  
1 5 10

<210> 236

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 236

Leu Glu Ala Asn Ile Ser Gln Ser Leu Glu  
1 5 10

<210> 237

<211> 9

<212> PRT

<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 237  
Leu Glu Ala Asn Ile Ser Gln Ser Leu  
1 5

<210> 238  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 238  
Leu Glu Ala Asn Ile Ser Gln Ser  
1 5

<210> 239  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 239  
Leu Glu Ala Asn Ile Ser Gln  
1 5

<210> 240  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 240  
Leu Glu Ala Asn Ile Ser  
1 5

<210> 241  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 241

Glu Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln  
1 5 10 15

Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe  
20 25 30

Thr Asn Trp Leu  
35

<210> 242

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 242

Ala Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln Glu  
1 5 10 15

Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe  
20 25 30

Thr Asn Trp Leu

<210> 243

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 243

Asn Ile Ser Gln Ser Leu Glu Gln Ala Gln Ile Gln Gln Glu Lys  
1 5 10 15

Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr  
20 25 30

Asn Trp Leu

<210> 244

<211> 32

<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 244

Ile	Ser	Gln	Ser	Leu	Glu	Gln	Ala	Gln	Ile	Gln	Gln	Glu	Lys	Asn
1				5					10					15

Met	Tyr	Glu	Leu	Gln	Lys	Leu	Asn	Ser	Trp	Asp	Val	Phe	Thr	Asn
				20					25					30

Trp Leu

<210> 245

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 245

Ser	Gln	Ser	Leu	Glu	Gln	Ala	Gln	Ile	Gln	Gln	Glu	Lys	Asn	Met
1				5					10					15

Tyr	Glu	Leu	Gln	Lys	Leu	Asn	Ser	Trp	Asp	Val	Phe	Thr	Asn	Trp
				20					25					30

Leu

<210> 246

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 246

Gln	Ser	Leu	Glu	Gln	Ala	Gln	Ile	Gln	Gln	Glu	Lys	Asn	Met	Tyr
1				5					10					15

Glu	Leu	Gln	Lys	Leu	Asn	Ser	Trp	Asp	Val	Phe	Thr	Asn	Trp	Leu
				20					25					30

<210> 247

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 247

Ser	Leu	Glu	Gln	Ala	Gln	Ile	Gln	Gln	Glu	Lys	Asn	Met	Tyr	Glu
1				5					10					15

Leu	Gln	Lys	Leu	Asn	Ser	Trp	Asp	Val	Phe	Thr	Asn	Trp	Leu
				20					25				

<210> 248

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 248

Leu	Glu	Gln	Ala	Gln	Ile	Gln	Gln	Glu	Lys	Asn	Met	Tyr	Glu	Leu
1				5					10					15

Gln	Lys	Leu	Asn	Ser	Trp	Asp	Val	Phe	Thr	Asn	Trp	Leu
				20					25			

<210> 249

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 249

Glu	Gln	Ala	Gln	Ile	Gln	Gln	Glu	Lys	Asn	Met	Tyr	Glu	Leu	Gln
1				5					10					15

Lys	Leu	Asn	Ser	Trp	Asp	Val	Phe	Thr	Asn	Trp	Leu
				20					25		

<210> 250

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 250  
 Gln Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys  
     1                    5                    10                    15

Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
                     20                    25

<210> 251  
 <211> 25  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide

<400> 251  
 Ala Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu  
     1                    5                    10                    15

Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
                     20                    25

<210> 252  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide

<400> 252  
 Gln Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn  
     1                    5                    10                    15

Ser Trp Asp Val Phe Thr Asn Trp Leu  
                     20

<210> 253  
 <211> 23  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide

<400> 253  
 Ile Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser  
     1                    5                    10                    15

Trp Asp Val Phe Thr Asn Trp Leu  
                     20

<210> 254  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 254  
Gln Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp  
1 5 10 15  
Asp Val Phe Thr Asn Trp Leu  
20

<210> 255  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 255  
Gln Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp  
1 5 10 15  
Val Phe Thr Asn Trp Leu  
20

<210> 256  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 256  
Glu Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val  
1 5 10 15  
Phe Thr Asn Trp Leu  
20

<210> 257  
<211> 19  
<212> PRT  
<213> Artificial Sequence



<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 257

Lys Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe  
1 5 10 15

Thr Asn Trp Leu

<210> 258

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 258

Asn Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr  
1 5 10 15

Asn Trp Leu

<210> 259

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 259

Met Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn  
1 5 10 15

Trp Leu

<210> 260

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 260

Tyr Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
1 5 10 15

<210> 261  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 261  
Glu Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
1 5 10 15

<210> 262  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 262  
Leu Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
1 5 10

<210> 263  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 263  
Gln Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
1 5 10

<210> 264  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 264  
Lys Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
1 5 10

<210> 265  
 <211> 11  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 265  
 Leu Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
   1                  5                  10

<210> 266  
 <211> 10  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 266  
 Asn Ser Trp Asp Val Phe Thr Asn Trp Leu  
   1                  5                  10

<210> 267  
 <211> 9  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 267  
 Ser Trp Asp Val Phe Thr Asn Trp Leu  
   1                  5

<210> 268  
 <211> 8  
 <212> PRT  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: synthetic  
       peptide  
  
 <400> 268  
 Trp Asp Val Phe Thr Asn Trp Leu  
   1                  5

<210> 269  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 269  
Asp Val Phe Thr Asn Trp Leu  
1 5

<210> 270  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 270  
Val Phe Thr Asn Trp Leu  
1 5

<210> 271  
<211> 47  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 271  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser  
35 40 45

<210> 272  
<211> 46  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 272

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln  
35 40 45

<210> 273

<211> 45

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 273

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met  
35 40 45

<210> 274

<211> 44

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 274

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu  
35 40

<210> 275

<211> 43

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 275

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu  
35 40

<210> 276

<211> 42

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 276

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln  
35 40

<210> 277

<211> 41

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 277

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu  
35 40

<210> 278

<211> 40

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 278

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu  
35 40

<210> 279

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 279

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr  
35

<210> 280

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 280

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val  
35

<210> 281  
<211> 37  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 281  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15  
Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30  
Lys Tyr Lys Asn Ala  
35

<210> 282  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 282  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15  
Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30  
Lys Tyr Lys Asn  
35

<210> 283  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 283  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15  
Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30  
Lys Tyr Lys



<210> 284  
 <211> 34  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 284  
 Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
     1                    5                    10                    15  
 Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
             20                    25                    30

Lys Tyr

<210> 285  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 285  
 Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
     1                    5                    10                    15  
 Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
             20                    25                    30

Lys

<210> 286  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 286  
 Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
     1                    5                    10                    15  
 Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
             20                    25                    30

<210> 287  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 287  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15  
Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu  
20 25 30

<210> 288  
<211> 30  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 288  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15  
Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu  
20 25 30

<210> 289  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 289  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15  
Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln  
20 25

<210> 290  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 290

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys  
20 25

<210> 291

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 291

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile  
20 25

<210> 292

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 292

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu  
20 25

<210> 293

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 293

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys

1	5	10	15
---	---	----	----

Cys Asn Gly Thr Asp Ala Lys Val Lys  
20 25

<210> 294  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 294  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val  
20

<210> 295  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 295  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys  
20

<210> 296  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 296  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala  
20

<210> 297  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 297  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15  
Cys Asn Gly Thr Asp  
20

<210> 298  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 298  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15  
Cys Asn Gly Thr  
20

<210> 299  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 299  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15  
Cys Asn Gly

<210> 300  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic

peptide

<400> 300

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn

<210> 301

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 301

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys

<210> 302

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 302

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

<210> 303

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 303

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn  
1 5 10 15

<210> 304

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 304

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu  
1 5 10

<210> 305

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 305

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys  
1 5 10

<210> 306

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 306

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile  
1 5 10

<210> 307

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 307

Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn  
1 5 10

<210> 308

<211> 10

<212> PRT

<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 308  
Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser  
1 5 10

<210> 309  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 309  
Tyr Thr Ser Val Ile Thr Ile Glu Leu  
1 5

<210> 310  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 310  
Tyr Thr Ser Val Ile Thr Ile Glu  
1 5

<210> 311  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 311  
Tyr Thr Ser Val Ile Thr Ile  
1 5

<210> 312  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>



<223> Description of Artificial Sequence: synthetic peptide

<400> 312

Tyr Thr Ser Val Ile Thr  
1 5

<210> 313

<211> 47

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 313

Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys  
1 5 10 15

Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
35 40 45

<210> 314

<211> 46

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 314

Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys  
1 5 10 15

Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
20 25 30

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
35 40 45

<210> 315

<211> 45

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 315

Val	Ile	Thr	Ile	Glu	Leu	Ser	Asn	Ile	Lys	Glu	Asn	Lys	Cys	Asn
1				5					10					15

Gly	Thr	Asp	Ala	Lys	Val	Lys	Leu	Ile	Lys	Gln	Glu	Leu	Asp	Lys
				20					25					30

Tyr	Lys	Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln	Ser	Thr
				35					40					45

<210> 316

<211> 44

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 316

Ile	Thr	Ile	Glu	Leu	Ser	Asn	Ile	Lys	Glu	Asn	Lys	Cys	Asn	Gly
1				5					10					15

Thr	Asp	Ala	Lys	Val	Lys	Leu	Ile	Lys	Gln	Glu	Leu	Asp	Lys	Tyr
				20					25					30

Lys	Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln	Ser	Thr
				35					40				

<210> 317

<211> 43

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 317

Thr	Ile	Glu	Leu	Ser	Asn	Ile	Lys	Glu	Asn	Lys	Cys	Asn	Gly	Thr
1				5					10					15

Asp	Ala	Lys	Val	Lys	Leu	Ile	Lys	Gln	Glu	Leu	Asp	Lys	Tyr	Lys
				20					25					30

Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln	Ser	Thr
				35					40			

<210> 318

<211> 42

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 318

Ile	Glu	Leu	Ser	Asn	Ile	Lys	Glu	Asn	Lys	Cys	Asn	Gly	Thr	Asp
1				5					10					15

Ala	Lys	Val	Lys	Leu	Ile	Lys	Gln	Glu	Leu	Asp	Lys	Tyr	Lys	Asn
				20					25					30

Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln	Ser	Thr
				35					40		

<210> 319

<211> 41

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 319

Glu	Leu	Ser	Asn	Ile	Lys	Glu	Asn	Lys	Cys	Asn	Gly	Thr	Asp	Ala
1				5					10					15

Lys	Val	Lys	Leu	Ile	Lys	Gln	Glu	Leu	Asp	Lys	Tyr	Lys	Asn	Ala
				20					25					30

Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln	Ser	Thr
				35					40	

<210> 320

<211> 40

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 320

Leu	Ser	Asn	Ile	Lys	Glu	Asn	Lys	Cys	Asn	Gly	Thr	Asp	Ala	Lys
1				5					10					15

Val	Lys	Leu	Ile	Lys	Gln	Glu	Leu	Asp	Lys	Tyr	Lys	Asn	Ala	Val
				20					25					30

Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln	Ser	Thr
				35					40

<210> 321

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 321

Ser Asn Ile Lys Glu Asn Lys Cys Asn Gly Thr Asp Ala Lys Val  
1 5 10 15

Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr  
20 25 30

Glu Leu Gln Leu Leu Met Gln Ser Thr  
35

<210> 322

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 322

Asn Ile Lys Glu Asn Lys Cys Asn Gly Thr Asp Ala Lys Val Lys  
1 5 10 15

Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu  
20 25 30

Leu Gln Leu Leu Met Gln Ser Thr  
35

<210> 323

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 323

Ile Lys Glu Asn Lys Cys Asn Gly Thr Asp Ala Lys Val Lys Leu  
1 5 10 15

Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu  
20 25 30

Gln Leu Leu Met Gln Ser Thr  
35

<210> 324  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 324  
Lys Glu Asn Lys Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile  
1 5 10 15  
Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln  
20 25 30  
Leu Leu Met Gln Ser Thr  
35

<210> 325  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 325  
Asn Lys Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln  
1 5 10 15  
Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu  
20 25 30  
Met Gln Ser Thr

<210> 326  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 326  
Lys Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu  
1 5 10 15  
Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met  
20 25 30  
Gln Ser Thr

<210> 327  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 327  
 Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu  
   1                  5                  10                  15  
 Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln  
                   20                  25                  30  
 Ser Thr

<210> 328  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 328  
 Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp  
   1                  5                  10                  15  
 Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser  
                   20                  25                  30  
 Thr

<210> 329  
 <211> 30  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 329  
 Gly Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys  
   1                  5                  10                  15  
 Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
                   20                  25                  30

<210> 330

<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 330

Thr Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr  
1 5 10 15

Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
20 25

<210> 331

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 331

Asp Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys  
1 5 10 15

Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
20 25

<210> 332

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 332

Ala Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn  
1 5 10 15

Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
20 25

<210> 333

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic

peptide

<400> 333

Lys Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala  
1 5 10 15

Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
20 25

<210> 334

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 334

Val Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val  
1 5 10 15

Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
20 25

<210> 335

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 335

Lys Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr  
1 5 10 15

Glu Leu Gln Leu Leu Met Gln Ser Thr  
20

<210> 336

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 336

Leu Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu  
1 5 10 15



Leu Gln Leu Leu Met Gln Ser Thr  
20

<210> 337  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 337  
Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu  
1 5 10 15

Gln Leu Leu Met Gln Ser Thr  
20

<210> 338  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 338  
Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln  
1 5 10 15

Leu Leu Met Gln Ser Thr  
20

<210> 339  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 339  
Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu  
1 5 10 15

Leu Met Gln Ser Thr  
20

<210> 340  
<211> 19

<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 340

Glu	Leu	Asp	Lys	Tyr	Lys	Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu
1				5					10				15	

Met Gln Ser Thr

<210> 341

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 341

Leu	Asp	Lys	Tyr	Lys	Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met
1				5					10				15	

Gln Ser Thr

<210> 342

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 342

Asp	Lys	Tyr	Lys	Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	Met	Gln
1				5					10				15	

Ser Thr

<210> 343

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 343

Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr

1	5	10	15
---	---	----	----

<210> 344  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 344  
 Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
 1 5 10 15

<210> 345  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 345  
 Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
 1 5 10

<210> 346  
 <211> 13  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 346  
 Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
 1 5 10

<210> 347  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 347  
 Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
 1 5 10

<210> 348  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 348  
Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
1 5 10

<210> 349  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 349  
Thr Glu Leu Gln Leu Leu Met Gln Ser Thr  
1 5 10

<210> 350  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 350  
Glu Leu Gln Leu Leu Met Gln Ser Thr  
1 5

<210> 351  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 351  
Leu Gln Leu Leu Met Gln Ser Thr  
1 5

<210> 352  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 352  
Gln Leu Leu Met Gln Ser Thr  
1 5

<210> 353  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 353  
Leu Leu Met Gln Ser Thr  
1 5

<210> 354  
<211> 37  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 354  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile  
20 25 30

Arg Lys Ser Asp Glu Leu Leu  
35

<210> 355  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 355

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile  
20 25 30

Arg Lys Ser Asp Glu Leu  
35

<210> 356

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 356

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile  
20 25 30

Arg Lys Ser Asp Glu  
35

<210> 357

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 357

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile  
20 25 30

Arg Lys Ser Asp

<210> 358

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 358

Phe	Tyr	Asp	Pro	Leu	Val	Phe	Pro	Ser	Asp	Glu	Phe	Asp	Ala	Ser
1				5					10					15

Ile	Ser	Gln	Val	Asn	Glu	Lys	Ile	Asn	Gln	Ser	Leu	Ala	Phe	Ile
			20					25						30

Arg Lys Ser

<210> 359

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 359

Phe	Tyr	Asp	Pro	Leu	Val	Phe	Pro	Ser	Asp	Glu	Phe	Asp	Ala	Ser
1				5					10					15

Ile	Ser	Gln	Val	Asn	Glu	Lys	Ile	Asn	Gln	Ser	Leu	Ala	Phe	Ile
			20					25						30

Arg Lys

<210> 360

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 360

Phe	Tyr	Asp	Pro	Leu	Val	Phe	Pro	Ser	Asp	Glu	Phe	Asp	Ala	Ser
1				5					10					15

Ile	Ser	Gln	Val	Asn	Glu	Lys	Ile	Asn	Gln	Ser	Leu	Ala	Phe	Ile
			20					25						30

Arg

<210> 361

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 361

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile  
20 25 30

<210> 362

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 362

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe  
20 25

<210> 363

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 363

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala  
20 25

<210> 364

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 364

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15



Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu  
20 25

<210> 365  
<211> 26  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 365  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser  
20 25

<210> 366  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 366  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln  
20 25

<210> 367  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 367  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn Glu Lys Ile Asn  
20

<210> 368

<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 368

Phe	Tyr	Asp	Pro	Leu	Val	Phe	Pro	Ser	Asp	Glu	Phe	Asp	Ala	Ser
1				5				10					15	

Ile	Ser	Gln	Val	Asn	Glu	Lys	Ile
				20			

<210> 369

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 369

Phe	Tyr	Asp	Pro	Leu	Val	Phe	Pro	Ser	Asp	Glu	Phe	Asp	Ala	Ser
1				5				10					15	

Ile	Ser	Gln	Val	Asn	Glu	Lys
				20		

<210> 370

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 370

Phe	Tyr	Asp	Pro	Leu	Val	Phe	Pro	Ser	Asp	Glu	Phe	Asp	Ala	Ser
1				5				10					15	

Ile	Ser	Gln	Val	Asn	Glu
				20	

<210> 371

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic

peptide

<400> 371

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val Asn  
20

<210> 372

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 372

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln Val

<210> 373

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 373

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser Gln

<210> 374

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 374

Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile Ser

<210> 375  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 375  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

Ile

<210> 376  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 376  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser  
1 5 10 15

<210> 377  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 377  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala  
1 5 10

<210> 378  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 378  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp  
1 5 10

<210> 379  
<211> 12  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 379  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe  
1 5 10

<210> 380  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 380  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu  
1 5 10

<210> 381  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 381  
Phe Tyr Asp Pro Leu Val Phe Pro Ser Asp  
1 5 10

<210> 382  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 382  
Phe Tyr Asp Pro Leu Val Phe Pro Ser  
1 5

<210> 383  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 383  
Phe Tyr Asp Pro Leu Val Phe Pro  
1 5

<210> 384  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 384  
Phe Tyr Asp Pro Leu Val Phe  
1 5

<210> 385  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 385  
Phe Tyr Asp Pro Leu Val  
1 5

<210> 386  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 386  
Tyr Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile  
1 5 10 15

Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg

20

25

30

Lys Ser Asp Glu Leu Leu  
35

<210> 387  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 387  
Asp Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser  
1 5 10 15

Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys  
20 25 30

Ser Asp Glu Leu Leu  
35

<210> 388  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 388  
Pro Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln  
1 5 10 15

Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser  
20 25 30

Asp Glu Leu Leu

<210> 389  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 389  
Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln Val  
1 5 10 15

Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp  
20 25 30

Glu Leu Leu

<210> 390  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 390  
Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln Val Asn  
1 5 10 15

Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu  
20 25 30

Leu Leu

<210> 391  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 391  
Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln Val Asn Glu  
1 5 10 15

Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
20 25 30

<210> 392  
<211> 30  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 392  
Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln Val Asn Glu Lys  
1 5 10 15

Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu



20

25

30

&lt;210&gt; 393

&lt;211&gt; 29

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: synthetic  
peptide

&lt;400&gt; 393

Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln Val Asn Glu Lys Ile  
1 5 10 15Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
20 25

&lt;210&gt; 394

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: synthetic  
peptide

&lt;400&gt; 394

Asp Glu Phe Asp Ala Ser Ile Ser Gln Val Asn Glu Lys Ile Asn  
1 5 10 15Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
20 25

&lt;210&gt; 395

&lt;211&gt; 27

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: synthetic  
peptide

&lt;400&gt; 395

Glu Phe Asp Ala Ser Ile Ser Gln Val Asn Glu Lys Ile Asn Gln  
1 5 10 15Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
20 25

&lt;210&gt; 396

&lt;211&gt; 26

&lt;212&gt; PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 396

Phe Asp Ala Ser Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser  
1 5 10 15

Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
20 25

<210> 397

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 397

Asp Ala Ser Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu  
1 5 10 15

Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
20 25

<210> 398

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 398

Ala Ser Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala  
1 5 10 15

Phe Ile Arg Lys Ser Asp Glu Leu Leu  
20

<210> 399

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 399

Ser Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe  
1 5 10 15

Ile Arg Lys Ser Asp Glu Leu Leu  
20

<210> 400

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 400

Ile Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile  
1 5 10 15

Arg Lys Ser Asp Glu Leu Leu  
20

<210> 401

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 401

Ser Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg  
1 5 10 15

Lys Ser Asp Glu Leu Leu  
20

<210> 402

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 402

Gln Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys  
1 5 10 15

Ser Asp Glu Leu Leu  
20

<210> 403  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 403  
Val Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser  
1 5 10 15

Asp Glu Leu Leu

<210> 404  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 404  
Asn Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp  
1 5 10 15

Glu Leu Leu

<210> 405  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 405  
Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu  
1 5 10 15

Leu Leu

<210> 406  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic

peptide

<400> 406

Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
1 5 10 15

<210> 407

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 407

Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
1 5 10 15

<210> 408

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 408

Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
1 5 10

<210> 409

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 409

Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
1 5 10

<210> 410

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 410  
Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
1 5 10

<210> 411  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 411  
Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
1 5 10

<210> 412  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 412  
Ala Phe Ile Arg Lys Ser Asp Glu Leu Leu  
1 5 10

<210> 413  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 413  
Phe Ile Arg Lys Ser Asp Glu Leu Leu  
1 5

<210> 414  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 414  
Ile Arg Lys Ser Asp Glu Leu Leu  
1 5

<210> 415  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 415  
Arg Lys Ser Asp Glu Leu Leu  
1 5

<210> 416  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 416  
Lys Ser Asp Glu Leu Leu  
1 5

<210> 417  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence; synthetic  
peptide

<400> 417  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
20 25 30

Trp Ile Arg Arg Ser  
35

<210> 418  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 418

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
20 25 30

Trp Ile Arg Arg

<210> 419

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 419

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
20 25 30

Trp Ile Arg

<210> 420

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 420

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
20 25 30

Trp Ile

<210> 421

<211> 31

<212> PRT

<213> Artificial Sequence



<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 421  
 Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
     1                    5                    10                    15  
 Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
                     20                    25                    30

Trp

<210> 422  
 <211> 30  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 422  
 Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
     1                    5                    10                    15  
 Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
                     20                    25                    30

<210> 423  
 <211> 29  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 423  
 Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
     1                    5                    10                    15  
 Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys  
                     20                    25

<210> 424  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 424

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser  
20 25

<210> 425

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 425

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu  
20 25

<210> 426

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 426

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu  
20 25

<210> 427

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 427

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu

<210> 428  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 428  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15  
Ile Glu Leu Asn Lys Ala Lys Ser Asp  
20

<210> 429  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 429  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15  
Ile Glu Leu Asn Lys Ala Lys Ser  
20

<210> 430  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 430  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15  
Ile Glu Leu Asn Lys Ala Lys  
20

<210> 431  
<211> 21  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 431

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys Ala  
20

<210> 432

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 432

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn Lys  
20

<210> 433

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 433

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu Asn

<210> 434

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 434

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu Leu

<210> 435  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 435  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile Glu

<210> 436  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 436  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

Ile

<210> 437  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 437  
Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser  
1 5 10 15

<210> 438  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 438  
 Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile  
 1 5 10

<210> 439  
 <211> 13  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 439  
 Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp  
 1 5 10

<210> 440  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 440  
 Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile  
 1 5 10

<210> 441  
 <211> 11  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 441  
 Ile Thr Leu Asn Asn Ser Val Ala Leu Asp Pro  
 1 5 10

<210> 442  
 <211> 10  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 442

Ile Thr Leu Asn Asn Ser Val Ala Leu Asp  
1 5 10

<210> 443

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 443

Ile Thr Leu Asn Asn Ser Val Ala Leu  
1 5

<210> 444

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 444

Ile Thr Leu Asn Asn Ser Val Ala  
1 5

<210> 445

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 445

Ile Thr Leu Asn Asn Ser Val  
1 5

<210> 446

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic

peptide

<400> 446

Ile Thr Leu Asn Asn Ser  
1 5

<210> 447

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 447

Thr Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile  
1 5 10 15

Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp  
20 25 30

Ile Arg Arg Ser

<210> 448

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 448

Leu Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu  
1 5 10 15

Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile  
20 25 30

Arg Arg Ser

<210> 449

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 449

Asn Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu  
1 5 10 15



Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg  
20 25 30

Arg Ser

<210> 450  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 450  
Asn Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn  
1 5 10 15

Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg  
20 25 30

Ser

<210> 451  
<211> 30  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 451  
Ser Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys  
1 5 10 15

Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20 25 30

<210> 452  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 452  
Val Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala  
1 5 10 15

Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser

20

25

<210> 453  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 453  
Ala Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys  
1 5 10 15  
Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20 25

<210> 454  
<211> 27  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 454  
Leu Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser  
1 5 10 15  
Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20 25

<210> 455  
<211> 26  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 455  
Asp Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp  
1 5 10 15  
Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20 25

<210> 456  
<211> 25  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 456

Pro Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu  
1 5 10 15

Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20 25

<210> 457

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 457

Ile Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu  
1 5 10 15

Glu Ser Lys Glu Trp Ile Arg Arg Ser  
20

<210> 458

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 458

Asp Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu  
1 5 10 15

Ser Lys Glu Trp Ile Arg Arg Ser  
20

<210> 459

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 459  
 Ile Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser  
     1                    5                    10                    15  
 Lys Glu Trp Ile Arg Arg Ser  
                     20

<210> 460  
 <211> 21  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide

<400> 460  
 Ser Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys  
     1                    5                    10                    15  
 Glu Trp Ile Arg Arg Ser  
                     20

<210> 461  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide

<400> 461  
 Ile Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu  
     1                    5                    10                    15  
 Trp Ile Arg Arg Ser  
                     20

<210> 462  
 <211> 19  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
           peptide

<400> 462  
 Glu Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp  
     1                    5                    10                    15  
 Ile Arg Arg Ser

<210> 463  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 463  
Leu Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile  
1 5 10 15

Arg Arg Ser

<210> 464  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 464  
Asn Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg  
1 5 10 15

Arg Ser

<210> 465  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 465  
Lys Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5 10 15

<210> 466  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 466

Ala Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5 10 15

<210> 467

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 467

Lys Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5 10

<210> 468

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 468

Ser Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5 10

<210> 469

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 469

Asp Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
1 5 10

<210> 470

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 470

Leu Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser

1	5	10
---	---	----

<210> 471  
 <211> 10  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 471  
 Glu Glu Ser Lys Glu Trp Ile Arg Arg Ser  
   1                  5                  10

<210> 472  
 <211> 9  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 472  
 Glu Ser Lys Glu Trp Ile Arg Arg Ser  
   1                  5

<210> 473  
 <211> 8  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 473  
 Ser Lys Glu Trp Ile Arg Arg Ser  
   1                  5

<210> 474  
 <211> 7  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 474  
 Lys Glu Trp Ile Arg Arg Ser  
   1                  5

<210> 475  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 475  
Glu Trp Ile Arg Arg Ser  
1 5

<210> 476  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 476  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15  
Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys  
20 25 30  
Glu Ala Ile Arg

<210> 477  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 477  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15  
Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys  
20 25 30  
Glu Ala Ile

<210> 478  
<211> 32  
<212> PRT



<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 478

Ala	Leu	Gly	Val	Ala	Thr	Ser	Ala	Gln	Ile	Thr	Ala	Ala	Val	Ala
1				5					10					15

Leu	Val	Glu	Ala	Lys	Gln	Ala	Arg	Ser	Asp	Ile	Glu	Lys	Leu	Lys
				20					25					30

Glu Ala

<210> 479

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 479

Ala	Leu	Gly	Val	Ala	Thr	Ser	Ala	Gln	Ile	Thr	Ala	Ala	Val	Ala
1				5					10					15

Leu	Val	Glu	Ala	Lys	Gln	Ala	Arg	Ser	Asp	Ile	Glu	Lys	Leu	Lys
				20					25					30

Glu

<210> 480

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 480

Ala	Leu	Gly	Val	Ala	Thr	Ser	Ala	Gln	Ile	Thr	Ala	Ala	Val	Ala
1				5					10					15

Leu	Val	Glu	Ala	Lys	Gln	Ala	Arg	Ser	Asp	Ile	Glu	Lys	Leu	Lys
				20					25					30

<210> 481

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 481

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu  
20 25

<210> 482

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 482

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys  
20 25

<210> 483

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 483

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu  
20 25

<210> 484

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 484

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala

1                      5                      10                      15  
 Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile  
                     20                      25

<210> 485  
 <211> 25  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
                     peptide

<400> 485  
 Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
   1                      5                      10                      15

Leu Val Glu Ala Lys Gln Ala Arg Ser Asp  
                     20                      25

<210> 486  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
                     peptide

<400> 486  
 Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
   1                      5                      10                      15

Leu Val Glu Ala Lys Gln Ala Arg Ser  
                     20

<210> 487  
 <211> 23  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
                     peptide

<400> 487  
 Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
   1                      5                      10                      15

Leu Val Glu Ala Lys Gln Ala Arg  
                     20

<210> 488  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 488  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15  
Leu Val Glu Ala Lys Gln Ala  
20

<210> 489  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 489  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15  
Leu Val Glu Ala Lys Gln  
20

<210> 490  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 490  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15  
Leu Val Glu Ala Lys  
20

<210> 491  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 491

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu Ala

<210> 492

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 492

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val Glu

<210> 493

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 493

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu Val

<210> 494

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 494

Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

Leu

<210> 495  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 495  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala  
1 5 10 15

<210> 496  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 496  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val  
1 5 10

<210> 497  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 497  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala  
1 5 10

<210> 498  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 498  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala  
1 5 10

<210> 499  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 499  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile Thr  
1 5 10

<210> 500  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 500  
Ala Leu Gly Val Ala Thr Ser Ala Gln Ile  
1 5 10

<210> 501  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 501  
Ala Leu Gly Val Ala Thr Ser Ala Gln  
1 5

<210> 502  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 502  
Ala Leu Gly Val Ala Thr Ser Ala  
1 5

<210> 503

<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 503  
Ala Leu Gly Val Ala Thr Ser  
1 5

<210> 504  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 504  
Ala Leu Gly Val Ala Thr  
1 5

<210> 505  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 505  
Leu Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala Leu  
1 5 10 15

Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu  
20 25 30

Ala Ile Arg Asp

<210> 506  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 506  
Gly Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala Leu Val



1	5	10	15
Glu	Ala	Lys	Gln
Ala	Arg	Ser	Asp
Ile	Glu	Lys	Leu
Lys	Glu	Ala	
20	25	30	

Ile Arg Asp

<210> 507  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 507
Val Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala Leu Val Glu
1 5 10 15
Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile
20 25 30

Arg Asp

<210> 508  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 508
Ala Thr Ser Ala Gln Ile Thr Ala Ala Val Ala Leu Val Glu Ala
1 5 10 15
Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp
20 25 30

<210> 509  
 <211> 30  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic peptide

<400> 509
Thr Ser Ala Gln Ile Thr Ala Ala Val Ala Leu Val Glu Ala Lys
1 5 10 15

Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25 30

<210> 510  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 510  
Ser Ala Gln Ile Thr Ala Ala Val Ala Leu Val Glu Ala Lys Gln  
1 5 10 15

Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25

<210> 511  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 511  
Ala Gln Ile Thr Ala Ala Val Ala Leu Val Glu Ala Lys Gln Ala  
1 5 10 15

Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25

<210> 512  
<211> 27  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 512  
Gln Ile Thr Ala Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg  
1 5 10 15

Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25

<210> 513  
<211> 26

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 513  
Ile Thr Ala Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser  
1 5 10 15  
Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25

<210> 514  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 514  
Thr Ala Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp  
1 5 10 15  
Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20 25

<210> 515  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 515  
Ala Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile  
1 5 10 15  
Glu Lys Leu Lys Glu Ala Ile Arg Asp  
20

<210> 516  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 516

Ala Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu  
1 5 10 15

Lys Leu Lys Glu Ala Ile Arg Asp  
20

<210> 517

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 517

Val Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys  
1 5 10 15

Leu Lys Glu Ala Ile Arg Asp  
20

<210> 518

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 518

Ala Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu  
1 5 10 15

Lys Glu Ala Ile Arg Asp  
20

<210> 519

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 519

Leu Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys  
1 5 10 15

Glu Ala Ile Arg Asp

<210> 520  
 <211> 19  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 520  
 Val Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu  
           1                  5                  10                  15

Ala Ile Arg Asp

<210> 521  
 <211> 18  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 521  
 Glu Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala  
           1                  5                  10                  15

Ile Arg Asp

<210> 522  
 <211> 17  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: synthetic  
 peptide

<400> 522  
 Ala Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile  
           1                  5                  10                  15

Arg Asp

<210> 523  
 <211> 16  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 523

Lys Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10 15

<210> 524

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 524

Gln Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10 15

<210> 525

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 525

Ala Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10

<210> 526

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 526

Arg Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10

<210> 527

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 527

Ser Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10

<210> 528

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 528

Asp Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10

<210> 529

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 529

Ile Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5 10

<210> 530

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 530

Glu Lys Leu Lys Glu Ala Ile Arg Asp  
1 5

<210> 531

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic

peptide

<400> 531

Lys Leu Lys Glu Ala Ile Arg Asp  
1 5

<210> 532

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 532

Leu Lys Glu Ala Ile Arg Asp  
1 5

<210> 533

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 533

Lys Glu Ala Ile Arg Asp  
1 5

<210> 534

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 534

Tyr Thr Gly Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 535

<211> 36



<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 535

Tyr Thr Asn Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 536

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 536

Tyr Thr Ser Ile Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 537

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide

<400> 537

Tyr Thr Ser Leu Ile Tyr Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15

Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 538  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 538  
Tyr Thr Ser Leu Ile His Arg Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30  
Trp Asn Trp Phe  
35

<210> 539  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 539  
Tyr Thr Ser Leu Ile His Asn Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30  
Trp Asn Trp Phe  
35

<210> 540  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
peptide

<400> 540  
Tyr Thr Ser Leu Ile His Thr Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu

20 25 30

Trp Asn Trp Phe  
35

<210> 541  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 541  
Tyr Thr Ser Leu Ile His Ser Leu Leu Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15  
Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30  
Trp Asn Trp Phe  
35

<210> 542  
<211> 38  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 542  
Ser Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30  
Arg Tyr Leu Lys Asp Gln  
35

<210> 543  
<211> 38  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic peptide

<400> 543

Asn Asn Leu Leu Arg Ala Ile Asp Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg Tyr Leu Lys Asp Gln  
35

<210> 544

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 544

Asn Asn Leu Leu Arg Ala Ile Gln Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg Tyr Leu Lys Asp Gln  
35

<210> 545

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
peptide

<400> 545

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Met Leu Gln Leu  
1 5 10 15

Thr Val Trp Gln Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30

Arg Tyr Leu Lys Asp Gln  
35